ABSTRACT

The present invention relates to a process for producing a metal oxide catalyst which is suitable for production of acrylic acid or acrylonitrile in one stage by a catalytic oxidation reaction of propane in a high yield.

The present invention is characterized by using a fine particle of metallic tellurium obtained by reducing a Te compound with a reductant as a raw material for producing an oxide catalyst including metal elements Mo-V-Nb-Te. The fine particle of metallic tellurium is preferably one containing primary particles having a particle size of not more than 4.0 μm. By using a metal oxide obtained by the process of the present invention, acrylic acid can be produced from propane by a one-stage oxidation reaction in a higher yield not less than 40%.